

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016579**Date Inspected:** 29-Aug-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Le Zhi Jiang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this date Caltrans Office of Structural Material (OSM) Quality Assurance (QA) Inspector, D.Sukanthan was present during the time noted above for observations relative to the work being performed.

OBG # BAY 6

This QA inspector received ZPMC Non Destructive Testing (NDT) notification 06512 to perform Magnetic particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control Personnel. This QA Inspector generated a Magnetic particle Test report for this date. The member is identified as Deck Panel. The weld tested is identified as follows:

(DP3114-001-008,011) Non Compliant Indication

Weld DP3114-001-008. Crack measures approximately 8mm. Y location is approximately 3530mm from the south end of the panel. Weld DP3114-001-011. Crack measures approximately 7mm. Y location is approximately 3820mm from the south end of the panel. This QA notified ZPMC Certified Welding Inspector (CWI) identified as Mr. Huang ming of this issue and that an incident report would be generated. ZPMC CWI informed this QA voluntarily ZPMC will perform Magnetic particle Testing (MT) 100% for all the Stiffener of this deck panel.

This QA Inspector randomly observed the following work in progress:

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## WELDING INSPECTION REPORT

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### OBG # BAY 6

This QA observed ZPMC qualified welding personnel identified as 054458 perform Submerged Arc Welding (SAW) Process on weld joint CB3002E-018-002. ZPMC Quality Control Personnel (QC) identified as Mr. Li Jia was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B-L2C-S-2.

### OBG # BAY 7

This QA observed ZPMC qualified welding personnel identified as 048801 perform Flux Cored Arc Welding (FCAW) Process on weld joint W2-SB5-001-013,014. ZPMC Quality Control Personnel (QC) identified as Mr. Wang Liyang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

This QA observed ZPMC qualified welding personnel identified as 062447 perform Flux Cored Arc Welding (FCAW) Process on weld joint W2-SB5-001-204,205. ZPMC Quality Control Personnel (QC) identified as Mr. Wang Liyang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

### OBG # BAY 8

This QA observed ZPMC qualified welding personnel identified as 500405 / 040706 perform Flux Cored Arc Welding (FCAW) Process on weld joint BK004A3-061-025,026,051,052. ZPMC Quality Control Personnel (QC) identified as Mr. Liu chuan gang was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132-3.

### OBG # CROSS BEAM CB12 (BLAST SHOP)

This Quality Assurance (QA) Inspector performed random visual inspection of OBG Cross beam CB12 outside and inside surfaces after grit blasting. Areas that marked for repair were recorded for future repair. And some areas requiring additional grinding were marked by QA Inspector and repaired by ZPMC personnel. See attached picture.

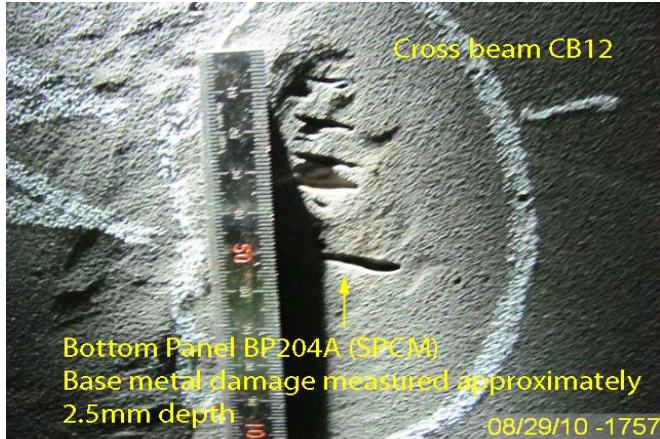
Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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## WELDING INSPECTION REPORT

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### Summary of Conversations:

As mention above

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-00422372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Sukanthan,Dhanasingh

Quality Assurance Inspector

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**Reviewed By:** Hall,Steven

QA Reviewer